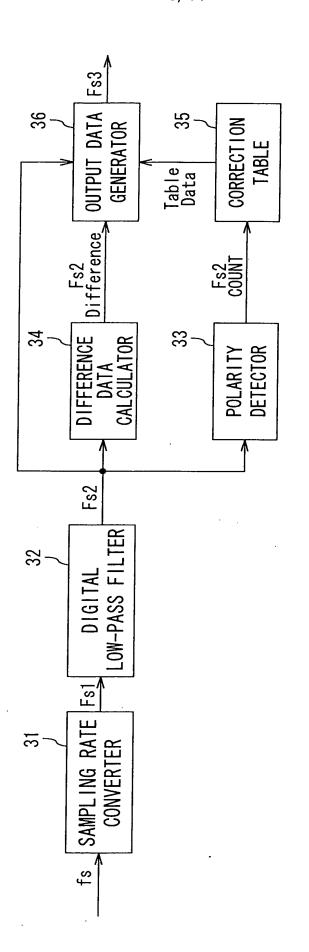


F1G. 2



F 6.

ALGORITHM OF DOUBLE-EXTENDED SAMPLING

INPUT DATA	OUTPUT DATA	
SAMPLED AT RATE = fs	CONVERTED TO RATE=Fs (=2 × fs)	
m	m	
m+1	0	
m+2	m+1	
m+3	0	
•	m+2	
-	0	
	m+3	
	0	
	•	
	•	

FIG. 4

CORRECTION TABLE A

Fs2COUNT	3 (=2Fs)	4 (=3Fs)	5 (=4Fs)	6 (=5Fs)
n=1	0	0	0	0
n=2	1/4 (= α)	1/4 (= α)	1/4 (= α)	1/4 (= α)
n=3	-	-1/4 (= β)	0	0
n=4		-	-1/4 (= β)	0
n=5	_	_	-	-1/4 (= β)

FIG. 5A

CORRECTION TABLE B

Fs2COUNT	3 (=2Fs)	4 (=3Fs)	5 (=4Fs)	6 (=5Fs)
n=1	0	0	0	0
n=2	-1/4 (= β)	$-1/4 (= \gamma)$	$-1/4 (= \gamma)$	$-1/4 (= \gamma)$
n=3	<u>-</u>	1/4 (= θ)	0	0 .
n=4	-	-	1/4 (= \theta)	0
n=5	_	_	_	1/4(=0)

FIG. 5B

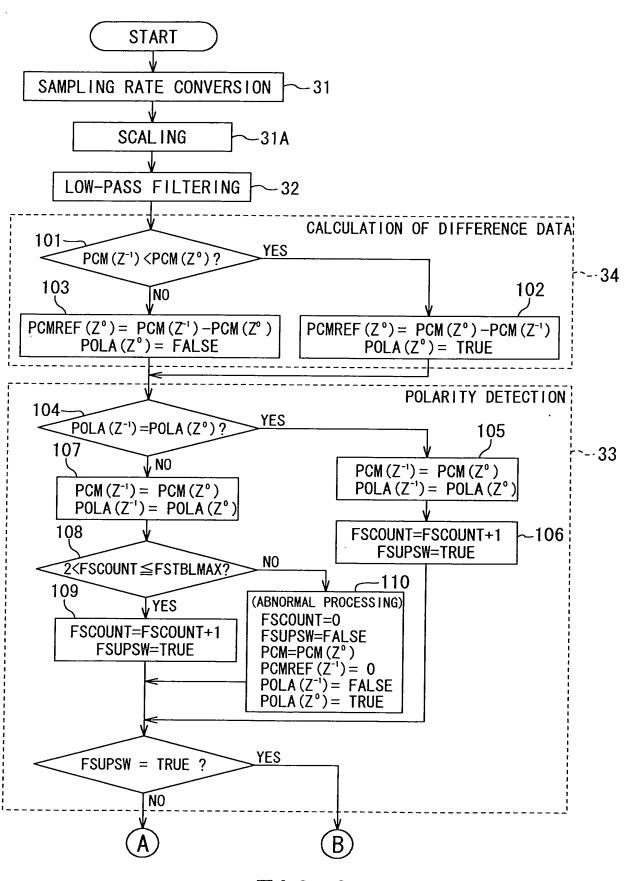


FIG. 6

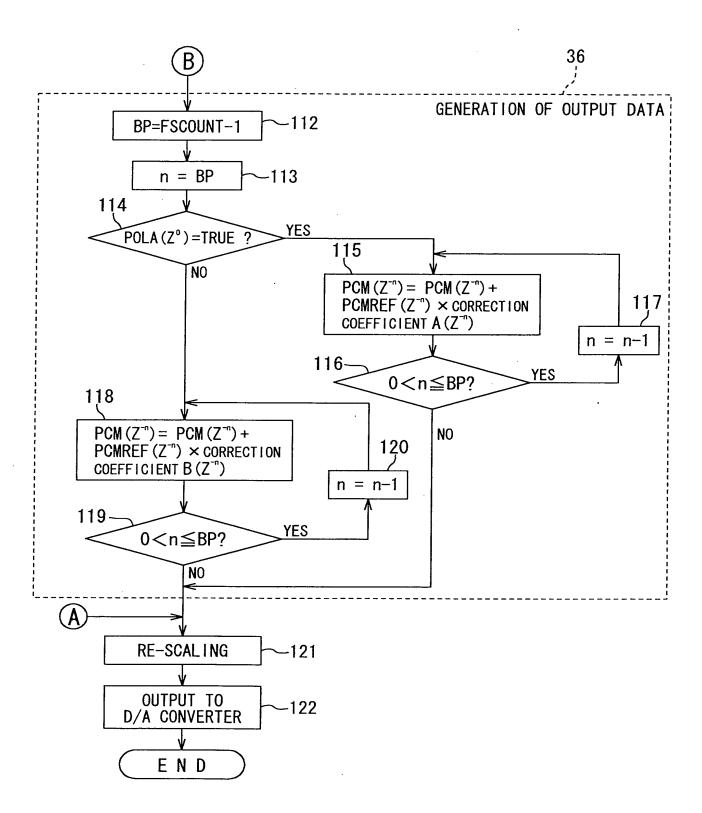
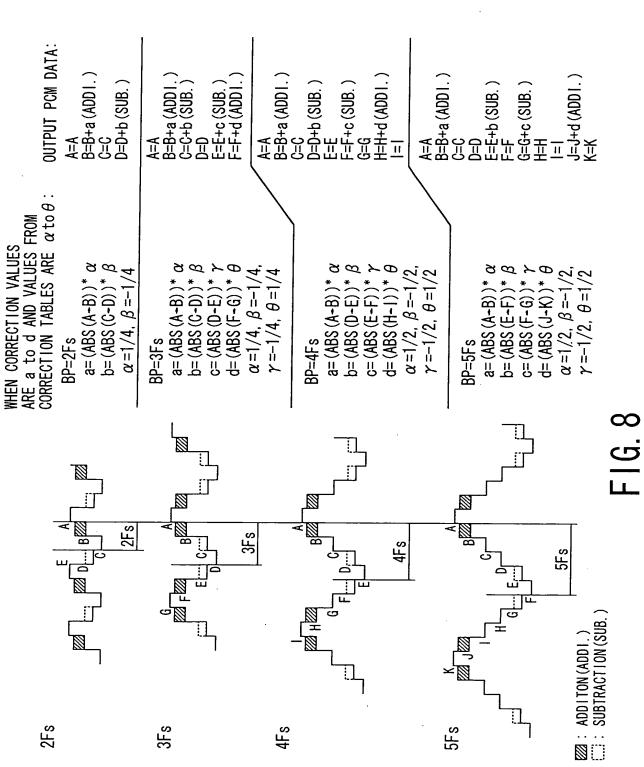
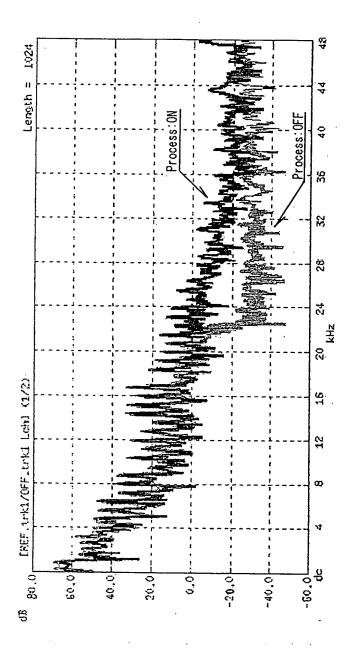


FIG. 7





[UPPER(ON) :WITH VOICE-QUALITY IMPROVEMENT PROCESSING LOWER(OFF):WITHOUT VOICE-QUALITY IMPROVEMENT PROCESSING FIG.9OUTPUT LEVELS OF SPECTRUM ANALYZER

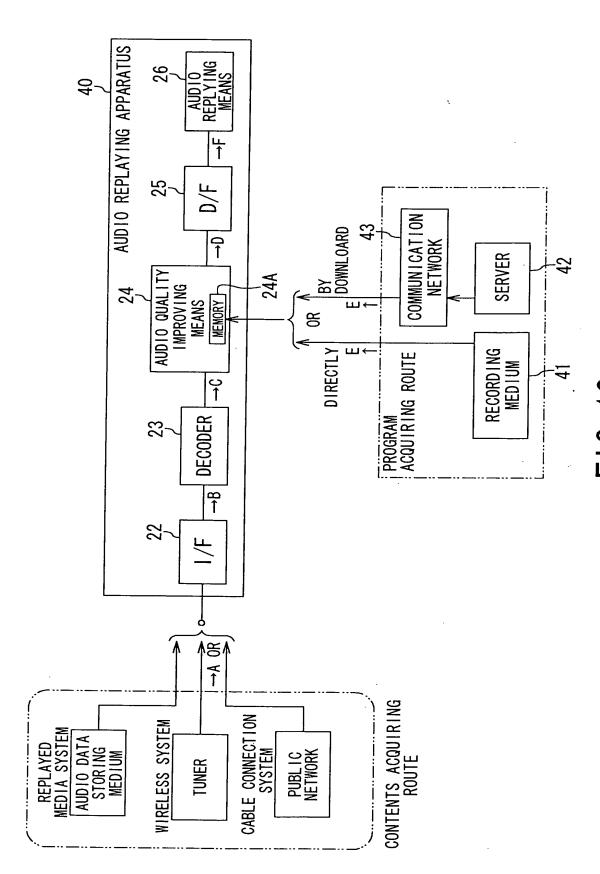


FIG. 10

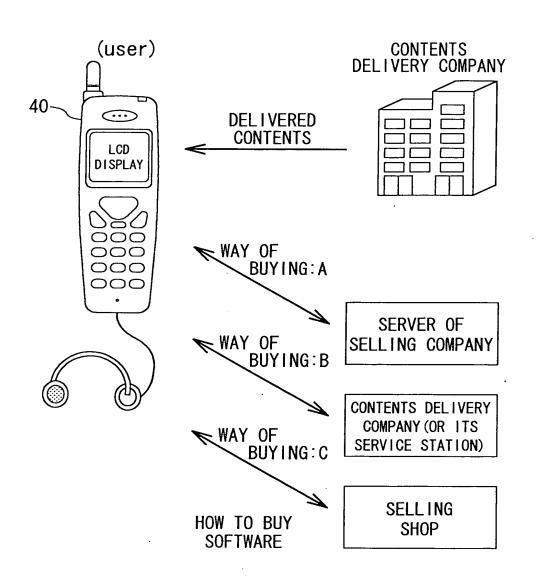


FIG. 11